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ABSTRACT

The purpose of this paper was to examine the effect of a teaching associateship experience in terms of teacher adaptability. Four preservice teachers taught 15-minute lessons to a primary grade student. The student presented opportunities for teacher adaptability by asking questions during the lessons. These lessons were videotaped so that the teacher's reactions to the questions could be critically assessed according to a 10-point scale of adaptability developed by David E. Hunt. Two preservice teachers, who had not yet been teaching associates, averaged 5 points out of 10. Two preservice teachers who had already been teaching associates for 14 weeks also averaged 5 points out of 10. This corresponds to a level of adaptability at which a teacher realizes the obstacle and makes some attempt to accommodate the student's needs through a modification in instruction. Results suggest that without increased adaptability as a focus, the 14-week teaching associateship does little to promote it, and a conscious effort must be made to improve adaptability. (Contains 14 references.) (Author/LL)

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The effect of experience upon teacher adaptability among pre-service teachers

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Abstract

The effect of a teaching associateship experience in terms of teacher adaptability was studied. Four pre-service teachers taught 15 minute lessons to a primary elementary student. The student presented opportunities for teacher adaptability by asking questions during the lesson. These lessons were videotaped so that teacher's reactions to these questions could be critically assessed according to a ten point scale of adaptability developed by David E. Hunt. The two teachers who had not yet been teaching associates averaged five points out of ten. The two teachers who had already been teaching associates for fourteen weeks also averaged five points out of ten. This corresponds to a level of adaptability at which a teacher realizes the obstacle and makes some attempt to accommodate the student's needs through a modification in instruction. This attempt does not necessarily result in the student understanding. These results suggest that without increased adaptability as a focus, the fourteen week teaching associateship does little to promote it.

THE PROBLEM

In the fast-paced, electronic, modern world, our children are growing up accustomed to interactive video as well as computer and video games which all react instantaneously to the child's influence. Then they get to school where the teachers have lessons which are well planned, but may not take into account the fact that the audience is a living, thinking, emotional being. Every day children have slightly different situations and these can be surprising to teachers at times. It is vital, however, for teachers to embrace these obstacles and adapt; to not just allow for differences, but to encourage the diversity that each student can share. This cannot happen unless the teacher has a high degree of adaptability. The teacher must be able to "read" the students and "flex" to accommodate their experiences. When new concepts can be tied in with a student's old experiences, they are learned.

THE NEED

If colleges of education would teach adaptability, it would certainly be beneficial. But before this is added to a curriculum, a need must first be established. At the College of Education at a Mid-Atlantic university the teaching associateship is by far the most important and most intense training a student receives. At no other time in the program is the student so immersed in the classroom where responding to students is vital. It may be, in fact, that there is no need for instruction on adaptability because the teaching associateship experience provides all the needed training in that area. This study investigated the matter.

LITERATURE REVIEW

In a classroom, teachers and students interact nearly all of the time. The students come to school every day with a somewhat different set of circumstances than the day before, even if they are just one day older. Teachers, in general, know this; yet many teachers, particularly novice teachers have a plan for the daily interactions and are reluctant to stray from that plan (Kagan and Tippins, 1991). If the students are always learning and growing, why should the teacher not adapt to these changes? Most would agree that the teacher should. Some would say that each lesson plan is modified before it is implemented so that it is appropriate for the level of the students when the lesson is taught (Van Manen, 1991). Others would say that just isn't good enough. To reach a higher level of teaching, a teacher must be able to "read" the students and "flex" the content to be appropriate at that instant (Hunt, 1976). The teacher must be adaptable.

In researching the topic of Teaching Flexibility, I have found it easier to look at what it seems to be similar to but is, in fact, not. It is not

"Instructional Decision Making", "Reflective Teaching", "Matching Models" or a "Teaching Innovation", although these do share some common aspects with flexibility. The concept of teaching flexibility is well described by Joyce and Hodges (1966), who stated in their discussion of instructional flexibility training that, "a teacher who can purposefully exhibit a wide range of teaching styles is potentially able to accomplish more than a teacher whose repertoire is relatively limited," (p. 409). Although this is a definition given in context, the flavor of the concept comes through. A look at contrasting techniques will help to better define the concept.

The topic of this paper differs from Instructional Decision Making in that the focus is not on choosing the appropriate model for a lesson or how to tailor the learning environment to students' needs. Rather the focus is on the minute-by-minute adjustments that are made (or not) at the time of the lesson, depending upon how successful the prior decision making proves to be. Although a good teacher will generally have created appropriate environments and chosen suitable models of instruction, the teacher is still less than omniscient,

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and there will be surprises. In the primary grades especially, students can have drastic mood swings, are easily distracted, and can belligerently refuse to learn. These are the times when a teacher must be adaptable in order to present concepts in a way that will be consistent with the students' needs, even if those needs change every few minutes. Students appreciate a teacher who has this sort of adaptability, and are more willing to be co-operative and learn (Vaughn, Schumm, Niarhos, and Gordon, 1993).

This focus on adaptability also differs from reflective teaching. The technique of reflective teaching focuses on thinking about teaching, and alternative ways of presenting the material in the future. It also encourages being up to date on current research, thus giving the reflective teacher more to think about. Reflective teaching has been compared to the careful pondering that goes into forming a medical diagnosis (Cruickshank, 1987). Flexibility deals with a more reflexive action, that can be reflected upon later. This helps to improve one's adaptations. Although reflective teaching is almost certainly one of the best ways to become more adaptable in one's

teaching style, it is quite possible to be a reflective teacher, yet be inflexible once the lesson has begun.

Flexibility may, but does not necessarily include, matching models to student behavior. Matching models is a technique used to bring about different types of change, generally in development or behavior (Hunt, 1971). It involves creating a certain environment and affecting the individual within that environment. Although this may be part of a teacher's repertoire, it is certainly not requisite to flexibility.

Although a teacher's ability to flex may correlate closely with his or her ability to think innovatively, the idea of flexing content to students' needs is not in itself an innovation. Generally a teaching innovation leads to a reform movement, or a shift in educational theory (Smith, Kleine, Prunty, and Dwyer, 1986). Flexing is rather something which has always been a part of good teaching, yet has rarely been well defined or made to be a focus.

The definitive study on this topic is described by David E. Hunt (1976) who tested several hundred teacher trainees' (teachers) abilities to "read" and "flex" to a student (learner). The learner in this study was a

Venezuelan immigrant who needed to understand the concept in order to pass his citizenship exam. The teacher was initially given the time and information to construct an informal plan for teaching the concept. The only information about the learner given to the teacher prior to their meeting was that stated above, and that the learner was a waiter in a restaurant.

The teacher was then given 15 to 20 minutes to communicate the concept of the balance of power in American Government to the learner. During the lesson, the learner brought up five predetermined obstacles, at appropriate times, which gave clues to the teacher about the learner's frame of reference, background and current understanding of the concept. Those milestones or checkpoints helped Hunt and his associate evaluators see whether the cues were being "read" by the teacher, and further, if having been read, they then influenced the methods or examples used by the teacher to communicate the concept. The adaptability was most easily seen as a reaction to the obstacles raised by the learner.

Each lesson was video-recorded and then rated on a scale from one to ten as a measure of adaptability

where the most adaptable teacher's received tens, and those most adherent to a rigid plan received ones. Hunt noted that within these extremes it was possible for the teacher to "read" the learner without "flexing" the content, but not possible to "flex" without "reading". It was also possible to attempt "flexing" but unsuccessfully. The following scale was used and the excerpts provide some examples:

RATING	BEHAVIORAL REFERENT
1	Completely insensitive.
3	Aware of obstacle, but does not modulate.
5	Aware of obstacles and makes some attempt to modulate.
7	Shifts and modulates presentation in flexible fashion.
9	Modulates and explores for more information from listener's frame of reference.

Obstacle: This sounds like it takes a long time...wouldn't it be better to have a revolution?

Low (scored 2) No, no, why did you say revolution? I noticed that your country has been plagued by revolutions. But you see, the Constitution of the United States with these three separate branches of power is the longest standing written constitution in the world.

High (scored 9) It might be simpler, but I don't know that the results would be as good. What do you think? In your country do you have revolutions? Was the country better off after the revolution? Hunt (1976)

This scale, although somewhat subjective, seems to be a good method of assessing teacher's adaptability. It takes into account the possibilities of "reading" without "flexing", unsuccessful attempts to "flex" and also the extremes.

Other studies have also used this format to test the communication of urban pre-service teachers

(Weinstein, Hunt, and Joyce, 1965), and National Teacher Corps trainees (Hunt, 1967). Peace Corps Trainees were also assessed using this type of study (Hunt, Joyce, and Weinstein, 1965; Hunt, 1965). This format has also been expanded to include assessments of behavior management techniques (Weinstein, Hunt and Joyce, 1965).

Hunt's (1967) communication study was the model for the study outlined in this paper. The scale was the same, and each lesson was videotaped. As in the above study, communication of a concept was the object, as opposed to behavior management. Contrastingly, the learner was a first grader, and the teachers were specifically chosen according to year in the College of Education. Overall, the studies are quite similar.

THE STUDY

HYPOTHESIS

The primary difference between the two populations that participated in this study was the teaching associateship experience. I hypothesized that there would not be a large enough difference in the adaptabilities of the two populations to create a measurable difference in scores. I believed that the College of Education's emphasis upon lesson plans outweighed any added experience in adapting to student cues gained during the teaching associateship.

SUBJECTS

The learner who participated in this study was a first grade boy who was born in France. His mother was French and his father was German. He had lived in both countries at some point in his life, and spoke both French and German as well as English. He had been living in America for two years at the time of the study, and was an "all-American kid".

He had a keen interest in wildlife and routinely brought a five-inch-high stack of wildlife fact cards in to school to study during his free time. He was also an avid soccer player, and thus quite well rounded. This child was chosen for the study due to his unique background, as well as for his ability to create opportunities for teachers to adapt. His wide knowledge of wildlife subjects allowed him to ask probing questions, creating situations which required the teachers to respond.

The teachers who participated in this study were all students in the elementary education program at the College of Education at a Mid-Atlantic university. Two were fifth-year students in the combined bachelor's /master's (BA/MT) program. These teachers had finished

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the teaching associateship, often referred to as "student teaching," the semester before the study. This consisted of two seven week placements and included at least two weeks of teaching a unit created and planned by these pre-service teachers.

The other two teachers were postgraduates, in their first year of a two year master's degree program. This corresponds with the fourth year of the College of Education's five year BA/MT program. These teachers had been teaching a unit to a class, but had not done a full-time teaching associateship. The postgraduates were selected, instead of undergraduate fourth year students at the same level in the College of Education, so that the number of years of schooling would be the same for both populations.

METHOD

The learner required very little preparation, other than the written permission to videotape that was needed from the learner's parents. In contrast with Hunt's study, the learner in this study was not coached. There were no specific obstacles to be raised. He was asked to be a good listener and to ask many good questions. This was easy for him and he enjoyed the lessons immensely.

The lessons taught were each about a different wildlife animal. The content was derived from a binder of wildlife animal fact sheets. They had pictures and descriptions of eating habits, lifestyles, and habitats of the wildlife animals. There was a wide selection for the teachers to choose from.

Upon arriving at the school, the teachers were told what would happen. The following was read to each teacher to ensure equal knowledge of the task before beginning.

You will have ten minutes to look at the information, then fifteen minutes to teach about the animal. You may use this time with the student any way you wish. This may include building a rapport with him, and

finding out more about him. I will tell you that he is a first grader whose father is German and mother is French. He speaks both languages as well as English. He is a bright student and an eager learner with a keen interest in wildlife. He also enjoys soccer. Please teach in whatever style makes you comfortable. I will be videotaping the lesson and will watch the tape later. After the lesson, I will let you know what this study is all about.

Once this had been read, the teachers had ten minutes to choose an animal from the binder, study it, and prepare an impromptu lesson plan in their heads. Knowledge of the facts was not of utmost importance, as the sheet was there for reference during the lesson.

After the ten minutes of teacher preparation, the student and the teacher were introduced, and the lesson, as well as the videocamera, started.

For eleven minutes the lesson was undisturbed, but in each case the teacher was silently alerted that there were only four minutes left in the lesson. At the conclusion of the lesson, the teachers were told about the study. Only two lessons were done per day in order to avoid learner fatigue.

The tape was critiqued according to Hunt's scale for teacher adaptability in evenings after the lessons. Each opportunity for teacher modulation was given a score. Each individual's scores were averaged to get the individual score. The individual scores were then averaged within the population to get the population average score. This method prevented a relatively inflexible teacher with many opportunities to adapt from skewing the scores drastically. Each individual was equally represented in the average for the population.

RESULTS

The postgraduates without the teaching associate experience had a population score of five points out of ten. The teachers who had completed the teaching associate experience also scored a population score of five points out of ten. This corresponds to a level of adaptability at which a teacher realizes the obstacle and makes some attempt to accommodate the student's needs through a modification in instruction. This attempt does not necessarily result in the student understanding.

ANALYSIS OF RESULTS

These results suggest that the fourteen week teaching associateship does little to promote teacher adaptability. This may be because adaptability is not a focus of the experience. Teaching associates are not specifically taught how to be adaptable and are not specifically told to increase adaptability over the fourteen weeks. The results suggest that such improvement does not just happen over time, rather a conscious effort must be made in order to improve adaptability.

CONCLUSIONS

There is a need for further study on this subject. Although this study was performed with great attention to detail and consistency, a longitudinal study with a larger sample size would be more conclusive. Also more evaluators could view the videos in order to reduce the possibilities of any one evaluator influencing the results.

The results suggest that the College of Education, despite having one of the best teacher training programs in the nation, still has room for improvement. If teacher adaptability is considered a priority, then instruction on attending to student cues should be included in a core course of the program. Opportunities to practice strategies used to flex content material to a student's needs and background should also be included. This could be accomplished during the peer teaching which occurs in the beginning of the fourth year. Doing so would require that peer teaching lessons become more than routine practice in the different models of instruction and lesson-plan-bound confidence boosters.

Lesson plan obsession may, in fact, be a large

part of the apparent lack of improvement in teacher adaptability. More emphasis should be placed upon what to do when the lesson plans fail due to unforeseen obstacles. This is when a good teacher can shine and a bad teacher tends to lose control of the class and sometimes herself. Again this could be practiced during the peer teaching sessions, but will only be effective if others are willing to help each other with sincere and definite criticisms.

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